

ABSTRACT

A new and improved reduced pressure index table for supporting a workpiece on a machine tool includes a base with a workpiece supporting table on one end of a support screw shaft for rotation to index the workpiece for machine tool operations and a closely coupled locking plate on the other end of the support screw shaft with a key lock for making accurate steps in precision increments. A pneumatically operated drive system is provided for rotating the table in two directions about a longitudinal axis of the support screw and an indexing wheel is provided adjacent to the screw shaft having a plurality of index slots spaced angularly around the periphery for securing the table in a selected fixed positions. Two secured pins on the locking plate are provided for engaging preset holes to lock the screw shaft and the workpiece supporting table in a fixed position and when the locking plate is retracted, the table is then permitted to rotate toward a next indexing position.